

PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Insole for Shoes

(A Communication from MUSEBECK SHOE COMPANY, a corporation organised under the Laws of the State of Illinois, United States of America, of 200, Commerce Street, Danville, in the State of Illinois, United States of America).

I, JOSEPH SUTTON WITHERS, British Subject, of the firm of J. S. Withers & Spooner, Chartered Patent Agents, of 10 Staple House, 51 & 52, Chancery Lane, London, W.C.2, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

This invention relates to an insole for shoes, the chief object being to correct pronation or inrolling of the foot due to weakened muscular development.

In my prior United States Patent No. 1,916,198, issued July 4, 1933, I have described a construction designed to effect the same purpose by placing a corrective pressure beneath the inner edge of the foot. In the majority of cases, I have found that the pronation can best be overcome by placing the corrective pressure at the inner side of the heel rather than beneath the instep of the foot. Many of the blood vessels and nerves supplying the foot pass through the spaces between the bones of the instep and thus render the instep peculiarly sensitive to un-natural pressures. The region of the os calcis, on the other hand, is particularly free from such blood vessels and nerve channels so that corrective pressure may be applied beneath the same with a minimum of interference with blood supply and nerves. When the os calcis is supported in proper position by this means, the remainder of the foot assumes its normal position in a natural manner.

It has also been proposed, in a method of making shoes, which includes permanently embossing the innersole opposite the metatarsal bones and forming a depression in the heel portion thereof, to provide a greater thickness on the inner side of the heel portion, the said greater thickness being afforded either by a wedge, or by cutting away the outer side of a thick innersole.

According to the present invention, there is provided an insole having the

[Price 1/-]

maximum thickness of the heel portion thereof at the inner side and the minimum thickness at the outer side, the said minimum thickness terminating at or about the front of the heel portion, the shank portion of the insole being substantially of uniform thickness. The greater thickness of the inner side of the heel portion places the necessary corrective pressure at that point for straightening up the os calcis. For more severe cases of pronation, an extension is formed upon the insole similar to the common arch support extension except that it is placed in the zone of the heel rather than of the instep.

In order that the said invention may be clearly understood and readily carried into effect the same will now be described more fully, by way of example, with reference to the accompanying drawing, in which:—

Figure 1 is a view of the bottom of an insole having the above mentioned extension formed thereon,

Figure 2 is a similar view of an insole without extension,

Figure 3 is a sectional view taken on the line 3-3 of Figure 1,

Figure 4 is a similar sectional view on the line 4-4 of Figure 1,

Figure 5 is a sectional view on the line 5-5 of Figure 2, and

Figure 6 is a sectional view of a completed shoe having the insole of Figure 1 applied thereto. The section is taken immediately ahead of the heel and looking toward the rear of the shoe.

Referring to the drawing, Figure 1, shows an insole 10 having the usual welt receiving recess 11 and stitching channel 12 formed therein. On the inner edge of the heel portion there is formed an extension 13 which diminishes in thickness from the line 14 of a normal insole to the edge of the extension. The outer side of the heel is reduced in thickness over an area bounded by the line 15. It will be seen that this area extends into the shank portion of the insole only far enough to insure relief beneath the forward part of the heel so that the entire os calcis region may be properly supported. The insole is preferably constructed of relatively thick leather (about three-sixteenths of an inch) so that the relief of the outer edge of the

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heel produces an appreciable difference in thickness between the inner and outer portions thereof. A slash 16 cut through the heel portion from the outer edge
5 nearly to the inner side of the heel improves flexibility in a well known manner without destroying the corrective effect of the insole.

In Figures 2 and 5, there is shown an
10 insole of the same type without the extension. In these figures reference numerals in the 100 series refer to parts having like constructions and functions to those in the unit series of Figures 1, 3
15 and 4.

In Figure 6, the insole of Figure 1 is shown assembled in a complete shoe. In this view there are shown the heel 17, outsole 18, upper 19 and insole 10 which
20 may be secured together in any well known manner. The extension 13 lies against the inner surface of the upper and serves to give an added corrective pressure to the foot when such is necessary.
25 The reduced thickness of the extension gives it sufficient flexibility to assume its desired position.

In the use of the shoe, the difference in thickness between the inner and outer
30 parts of the heel portion causes a corrective pressure to be applied at the inner side of the heel which forces the os calcis to assume its natural position when the muscles themselves are too weak to accomplish the purpose. Furthermore, this
35 pressure is applied in a region where there is no interference with blood supply or nerve channels.

While the invention has been particularly
40 described in some detail, the exact

form thereof may be varied without departing from the scope of the invention as defined by the appended claims. For example, the invention is not limited to the welt type of shoe but may be used with shoes manufactured by any of the known methods.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An insole for shoes, having the maximum thickness of the heel portion thereof at the inner side and the minimum thickness at the outer side, the said minimum thickness terminating at or about the front of the heel portion, the shank portion of the insole being substantially of uniform thickness.

2. An insole according to claim 1, formed from a single thickness of material, and having an extension projecting from the inner edge of the heel portion.

3. An insole according to claim 2, wherein the extension decreases in thickness toward the edge thereof.

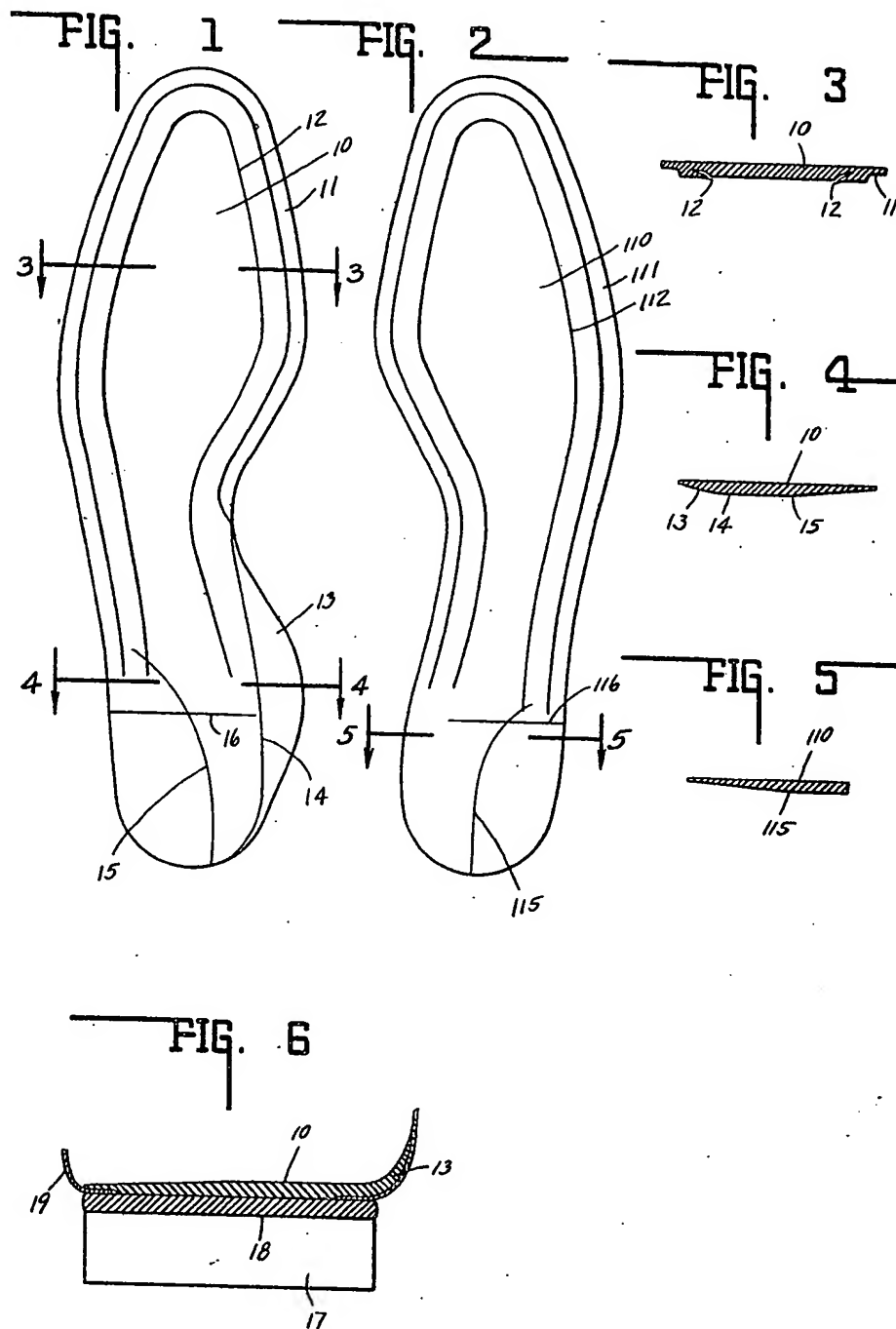
4. An insole for shoes, substantially as hereinbefore described with reference to the accompanying drawing.

Dated this 31st day of August, 1934.

J. S. WITHERS & SPOONER,
Chartered Patent Agents,
Staple House, 51 and 52, Chancery
Lane, London,
Agents for the Applicant.

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[This Drawing is a reproduction of the Original on a reduced scale.]



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